## OCEANIC ORNITHOLOGICAL SURVEY BETWEEN DERBY, W.A. AND DARWIN, N.T.

### by John L. McKean

#### INTRODUCTION

Through the kindness of the Royal Australian Navy, during early November, I was able to travel from Derby to Darwin aboard the Patrol Boat H.M.A.S. Assail. Birds seen at sea during daylight travelling were logged, and bird populations occurring on the various islands on which I landed were also noted. The only previous work of any substance covering this area is that of Serventy (1952) who during July, August and October, visited a number of islands and reefs on the Sahul Shelf. As well as publishing his own observations, Dr. Serventy collated additional information from several other sources.

#### DERBY TO SCOTTS REEF

H.M.A.S. Assail left Derby at about 1500 hrs. on November 6, 1979 and arrived off Scotts Reef at 0830 hrs. on November 7, 1979.

Observations en route:- 6/11/79: 1 Crested Tern Sterna bergii 16°54'S, 123°25'E. Crested Tern 16°44'S, 123°22'E, 7/11/79; 1 Unidentified Petrel, appeared smaller and darker than the Wedge-tailed Shearwater Puffinus pacificus but still had a relatively long wedge-shaped tail. I suspect the bird was Jouanin's Petrel Bulweria fallax which has not vet been recorded in Australian waters. Unfortunately, I could not obtain a clear enough view of the bird's bill to ascertain whether it was short and stubby with elevated nostrils, as in Bulweria, or long and slender, without elevated nostrils, as in Future observers in this area should be alert to the possibility of B. fallax's occurrence here (see also Fullager in Slater 1970) 14°30'S, 122°15'E. 1 Wedge-tailed Shearwater 14°28'S, 122°14'E, 3 Unidentified Petrels (again, possible Jouanin's Petrels), 1 Brown Gannet Sula leucogaster, 1

Pomarine Skua Stercorarius pomarinus (light phase) 14°15'S. 122°05'E.

SCOTTS REEF:- We landed on Sandy Island (14°03'S, 121°46'E) at 0900 hrs. on November 7, 1979. It is a large elevated sand bank devoid of any vegetation. At one end is a substantial concrete block house on pillars which serves as an automatic weather station. Two young men from one of the oil companies were maintaining a temporary communication station and living in a large tent. They gave me an accurate description of a Sacred Kingfisher Halcyon sancta which visited Sandy Island briefly on November 4, 1979. We returned to H.M.A.S. Assail at 1020 hrs.

Brown Gannet. 16 birds seen perched on coral blocks on the surrounding reef.

Turnstone Arenaria interpres. 40 birds on beach.

Grey-tailed Tattler *Tingi brevipes.* 6 birds on beach.

Crested Tern. 20 birds on beach and reef.

Lesser Crested Tern Sterna bengalensis. 10 birds seen on beach.

Common Noddy *Anous stolidus*. 3 birds perched on weather tower, 20 birds on beach and a few seen just off-shore.

Yellow Wagtail *Motacilla flava*. A bird flew past the mining company tent giving its characteristic 'tsweep' call in flight. located it feeding under the weather tower and studied it for several minutes at close quarters. It was in eclipse plumage, brow-

nish above including the rump, off white below with a stripe above and below the eye and two light bars on the folded wing. At 1040 hrs. I saw what was almost certainly the same individual land briefly on top of the bridge of the H.M.A.S. Assail which was anchored about 1 km. off-shore.

Arctic Warbler *Phylloscopos borealis*. A freshly dead specimen was found below the weather tower. It has been lodged in the Western Australian Museum Reg. No. A16285 (See Fig. 1). The Arctic Warbler breeds through the northern Palearctic and northwestern Nearctic and winters in Southern China, Burma and through Southeast Asia to the Moluccas. It has not previously been recorded in Australia. Full details will be published elsewhere.

SCOTTS REEF TO ASHMORE REEF H.M.A.S. Assail left Scotts Reef at 2200 hrs. on 7/11/79 and arrived at the Ashmore Reef area (12 15'S. 122 58'E) at 0900 hrs. on 8/11/79.

Observations en route: - 8/11/79; 1 Streaked Shearwater Calonectris leucomelas. Pale billed Shearwater, larger than Wedge-tailed Shearwater, brown above with pale streaked forehead, white below, including underwing coverts. This species breeds on the Bonin and Pescadores Islands near Japan and winters from Borneo to Papua New Guinea and the northern Coral Sea. Although this sighting constitutes the first record for Western Australia, it is to be expected of N.W. Australia. 2 Sooty Terns Sterna fuscata 12 49'S, 122 28'E. 2 Redtailed Tropic-birds Phaethon rubricauda 12 44'S, 122 31'E. 1 Streaked Shearwater. 2 Brown Gannets, 1 Sooty Tern 12 37'S. 122 37'E. 9 Brown Gannets, 3 Bridled Terns Sterna anaethetus 12'30'S. 122'42'E. 1 Brown Gannet, 1 Lesser Crested Tern, 2 Sooty Terns 12 29'S, 122-43'E. 3 Forktailed Swifts Apus pacificus heading SSE flying about 18 metres above water. 12 24'S. 122 46'E. 7 Sooty Terns Sterna fuscata 12°24'S. 122°46'E.

ASHMORE REEF:- Seabirds were abundant in the vicinity of the reef and while at anchor, most of my time was spent observing them. Except for the following species, all were noted in numbers on the three islands of the reef and are dealt with there.

White-winged Black Tern Chlidonias leucoptera. 1 seen on 8/11/79 while near West Island, 2 seen near East Island on 8/11/79 and 2 off East Island on 9/11/79.

Lesser Noddy *Anous tenuirostris.* 1 seen on 9/11/79 ½ km off West Island and readily distinguished from the Common Noddy by its smaller size, blacker plumage and the greater amount of white on the cap.

Yellow Wagtail *Motacilla flava*. On 9/11/79 at 0835 hrs. while anchored off East Island I heard the call of a Yellow Wagtail. Quickly calling in reply I detained it long enough to see it in outline. The comparatively long tail and call eliminated any possibility of confusion with *Anthus novaeseelandiae*. The lack of competent resident bird watchers in northern Western Australia undoubtedly is the reason why this species has not been recorded more commonly before.

EAST ISLAND:- We landed on East Island at 1300 hrs. on 8/11/79. It is a low flat island vegetated with several grass species and at least four different protrate herbs. Only one bush of any size was noted. We returned to H.M.A.S. Assail at 1320 hrs.

Brown Gannet. Over 300 birds were noted, loafing on beaches or exposed coral. All birds seen were in immaculate adult plumage.

Less Frigate-bird Fregata ariel. 1 flying over reef edge.

Large White Egret Egretta alba. 1 bird seen on beach.

Little Egret Egretta garzetta. 25 birds scattered throughout the island, at least 6 birds

were in full breeding plumage. An Indonesian origin seems just as likely as an Australian one.

Reef Egret Egretta sacra. Approximately 150 birds seen frequenting beaches and exposed reef. The white colour phase greatly predominated.

Lesser Golden Plover *Pluvialis dominica*. At least 60 birds present frequenting the vegetated plateau and beaches.

Mongolian Sand Dotterel *Charadrius mong-golus*. Several seen along the beaches.

Large Sand Dotterel Charadrius leschenaultii. Over 100 birds along the beaches.

Oriental Dotterel Charadrius veredus. A single bird seen in short grass on the plateau.

Whimbrel *Numerius phaeopus*. Ten birds seen on plateau and along the beaches.

Eastern Curlew *Numerius madagascariensis*. A flock of 60 flushed off the beach as we landed.

Bar-tailed Godwit *Limosa lapponica*. Over 40 birds seen along the beaches.

Red-necked Stint *Calidris ruficollis.* About 40 birds seen along the beaches.

Great Knot Calidris tenuirostris. A flock of about 40 birds along one of the beaches.

Turnstone. Ten birds feeding on the exposed reef and about 100 scattered along the beaches.

Grey-tailed Tattler. Sixty birds, including 40 in a flock on the plateau, the balance frequenting the beaches.

Crested Tern. Some 200 pairs were breeding in a little group on the plateau. Occupied scrapes contained single eggs. Another 200 pairs were present but had not yet laid.

Bridled Tern. At least 200 flying juvenile birds were present on the plateau.

Sooty Tern. Four different courting groups had formed on the plateau containing an estimated total of 5000 pairs.

Common Noddy. About 3000 adults and 7000 juveniles present on the plateau. Breeding apparently had taken place some months earlier judging from the numbers of dead fledglings about. Many hundreds had apparently been killed for food by the Indonesian fishermen who visit this reef, and large piles of wings that had been pulled or cut off the birds were found at different points around the island.

WEST ISLAND:- We landed on West Island at 1030 hrs. on 9/11/79. It is another low sandy calcareous island with a grass and herb covered plateau. A line of large leaved bushes or small trees (Messersmidia argentea) grew around the rim of the plateau. The trees were much frequented by Reef Egrets and provided roosting sites for the three land bird species found here. We returned to H.M.A.S. Assail at 1200 hrs.

Lesser Frigate Bird. One bird flew low over the island. The wings and skins of many of this species together with numerous Brown Gannets remains were found at several Indonesian camp sites.

White-faced Heron Ardea novaehollandiae. One bird seen on the beach.

Reef Egret. Approximately 80 birds present, the white colour phase being much more numerous.

Lesser Golden Plover. About 20 birds frequented the plateau.

Oriental Dotterel. Five birds seen on the grassed plateau.

Whimbrel. At least 80 birds seen around the beaches.

Turnstone. Twenty birds seen along the beaches.

Grey-tailed Tattler. Five birds noted on one of the beaches.

Common Sandpiper. A single bird skulking behind the *Messersmidia* line on the plateau.

Crested Tern. Approximately 100 birds roosting and flying along the beaches.

Lesser Crested Tern. Three birds noted flying along a beach.

Common Noddy. Ten birds recorded roosted in the *Messersmidia* trees.

Sacred Kingfisher. A single bird seen flying along the *Messersmidia* tree line.

Horsefield Bronze Cuckoo Chrysococcyx basalis. A single bird flushed from the shelter of the Messersmidia trees. It was later seen to advantage and positively identified.

Tree Martin Petrochelidon nigricans. One seemingly exhausted bird was noted perching on a Messersmidia tree. It was rather reluctant to fly.

MIDDLE ISLAND:- We landed on Middle Island at 1330 hrs. It is similar to the preceeding but with only 10 *Messersmidia* trees. It is otherwise distinguished by the presence of a fresh water well which is of prime importance to the Indonesian fishermen. We returned to H.M.A.S. Assail at 1440 hrs.

Little Egret. Eight birds seen roosting on the *Messersmidia* trees. Two were in breeding plumage.

Reef Egret. Approximately 100 birds present, either roosting in the *Messersmidia* trees or along the beach.

Lesser Golden Plover. Twenty birds seen on the plateau and several along beaches.

Large Sand Dotterel. A flock of about 80 birds seen on a beach.

Bar-tailed Godwit. About 10 birds scattered along the beaches.

Red-necked Stint. One bird noted among the flock of Large Sand Dotterels.

Turnstone. Twenty birds seen along the beaches.

Crested Terns. About 100 birds roosting along the beaches.

Bridled Terns. About 10 flying juveniles including one young which could barely fly.

Sooty Tern. Several groups of courting birds totalling about 4000 pairs were present on the plateau.

Common Noddy. About 500 adults and 1500 juveniles were scattered over the plateau.

# ASHMORE REEF TO CARTIER ISLAND

H.M.A.S. Assail left Ashmore Reef at 0400 hrs. on 10/11/79 and arrived at Cartier Island (12 32'S, 123 33'E) at 0840 hrs. on the same day travelling via Hibernia Reef.

Observations en route:- 10/11/79; 5 Sooty Terns, 25 Common Noddies 12 07'S, 123-11'E. 5 Sooty Terns, 6 Common Noddies, 11 58'S, 123 21'E. 1 Common Noddy 12 08'S, 123 22'E. 3 Sooty Terns, 2 Common Noddies 12-14'S, 123-22'E. 2 Sooty Terns, 8 Common Noddies 12-18'S, 123-26'E. 6 Sooty Terns, 1 Common Noddy 12 28'S, 123 31'E. 3 Lesser Crested Terns. 1 Bridled Tern, 4 Sooty Terns 12-31'S, 123-32'E.

CARTIER ISLAND:- We landed on Cartier Island, which is an elevated sandbank lacking in vegetation, at 1330 hrs. on 10/11/79 and returned to H.M.A.S. Assail at 1420 hrs. Serventy (1952) states this sand cay has an area of 110 acres; however I would estimate its area as less than 5 acres!

Brown Gannet. One bird seen flying along a beach.

Turnstone. Six birds noted on a beach.

Greenshank. One seen and heard on exposed reef.

Reef Egret. Two dark phase birds resting on a beach.

Crested Tern. Not seen but two old rotten eggs were found on the sandy plateau.

Lesser Crested Tern. About 200 birds in breeding plumage were gathered at one end of the island. Several were displaying with fish in their bills.

#### CARTIER ISLAND TO DARWIN

H.M.A.S. Assail left Cartier Island at 2030 hrs. on November 10th, 1979 and berthed in Darwin at 0900 hrs. on November 12th, 1979.

Observations en route:- 11/11/79; Common Noddy 12°29'S, 125°21'E, 1 Sooty Storm Petrel Oceanodroma matsuderirae. This large all dark fork-tailed storm petrel would be very difficult to distinguish from O. monorhis were that species also found to occur in northern Australian water. Serventy and Whittell (1976) detail the previous recorded occurrences of the Sooty Storm Petrel in Western Australia except for a recent sighting (Kolichis, 1977). Common Noddy 12°29'S, 125°35'E, 8 Common Noddies 12°29'S, 125°46'E, 3 Sooty Terns 12°29'S, 125°48'E, 2 Wilson's Storm Petrels 12°29'S, 125°53'E, 2 Wilsons Storm Petrels, 1 Brown Gannet, 4 Common Noddies 12°29'S, 126°01'E, 2 Sooty Terns, 3 Common Noddies 12°29'S. 126°05'E, 3 Sooty Terns, 20 Fork-tailed Swifts heading South about 30 metres above the water, 12°29'S, 126°11'E, 1 Brown Gannet, 1 Pomarine Skua 12°29'S, 126°28'E, 1 Wilsons Storm Petrel 12°29'S, 126°32'E, 3 Brown Gannets 12°29'S, 126 34'E. 5 Pomarine Skuas, 1 Whitewinged Black Tern 12°29'S, 126°41'E, 1

Wilsons Storm Petrel 12°29'S, 127°04'E. 5 Brown Gannets 12°29'S, 127°19'E. Pomarine Skuas 12°29'S, 127°27'E, 1 Brown Gannet 12°29'S, 127°56'E. 3 Brown Gannets 12°29'S, 128°03'E. 4 Brown Gannets 12°29'S, 128°12'E, 1 Brown Gannet 12°29'S. 128°14'F 12/11/79: 1 Brown Gannet, 21 Whitewinged Black Terns, 12°22'S, 130°23'E, 1 Brown Gannet, 1 Great Frigate-bird, 18 Lesser Frigate-birds, 9 White-winged Black Terns, 12°22'S, 130°27'E, 13 Lesser Frigate birds, 28 White-winged Black Terns, 12°20'S, 130°31'E, 5 Lesser Frigate-birds. 19 White-winged Black Terns, 3 Crested Terns. 12°20'S. 130°35'E. 1 Brown Gannet, 4 Lesser Frigate-birds, 2 Crested Terns, 12°20'S, 130°43'E.

#### LANDBIRD MOVEMENTS

Despite the brevity of this survey and the short amount of time spent on the five islands visited, six land birds were recorded, all known migrants from either Australia or Asia. It thus seems likely that if the means were available for more sustained observations, a most interesting amount of data on bird migration between Australia and Asia could be gathered.



Fig. 1. Arctic Warbler specimen found dead on Scotts Reef



Fig. 2 Sooty Terns in flight on Middle Island, Ashmore Reef